Version of Amendments with Markings to Show Changes Made

27. (Twice Amended) A coated implant comprising an implant and a coating, wherein said

coating comprises a deposit of crystals nucleated directly onto the implant from solution with the

coating having an average bond strength to the implant of between 40 to 65 Mpa, wherein said

coating comprises magnesium ions, calcium ions, and phosphate ions, and wherein said coating

induces formation of bone cells from progenitor cells.

33. (Amended) The coated implant of claim 27, said coating comprising one or more of

amorphous carbonate calcium phosphate, hydroxyapatite, calcium deficient apatite, [and] hydroxyl

carbonate apatite, [oroctacalcium] octacalcium phosphate, dicalcium phosphate dihydrate or calcium

carbonate.

36. (Twice Amended) A coated implant comprising an implant, a first coating, and a second

coating, wherein said first coating comprises a deposit of crystals nucleated directly onto the implant

from solution with the coating having an average bond strength to the implant of between 40 to 65

Mpa wherein said first coating [comprising] comprises magnesium ions, calcium ions, and phosphate

ions, and wherein said coating induces formation of bone cells from progenitor cells,

wherein [a] the second coating [is applied to said implant after said first coating, said second

coating comprising] comprises calcium and phosphate ions.

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9

37. (Amended) The coated implant of claim [37] <u>36</u> wherein the second coating comprising calcium and phosphate ions further comprises octacalcium phosphate.